

DRAFT FOR PROCEEDINGS

**Saving and Asset-Accumulation Strategies Used by
Low-Income Individuals**

Paper prepared for “Inclusion in Asset Building: Research and Policy Symposium”
Center for Social Development
Washington University
September 21-23, 2000

Amanda Moore, M.S.W.,
Research Associate

Sondra Beverly, Ph.D.,
Faculty Associate

Michael Sherraden, Ph.D.,
Director

Margaret Sherraden, Ph.D.,
Faculty Associate

Lissa Johnson, M.S.W.,
Project Director

Mark Schreiner,
Research Director

Center for Social Development
George Warren Brown School of Social Work
Washington University
Campus Box 1196
One Brookings Drive
St. Louis, MO 63130
314-935-7433
csd@gwbweb.wustl.edu

January 2001

The authors acknowledge the generous support of the Ford Foundation, which made this research and publication possible.

ABSTRACT

This paper presents quantitative and qualitative data regarding the saving and asset-accumulation strategies used by low-income participants in Individual Development Account programs (IDAs). The results of a cross-sectional survey with 298 IDA participants and case studies with 15 IDA participants—the first methods that assessed saving behavior among this population—demonstrate that low-income individuals use psychological and behavioral strategies to save, deposit, and maintain assets. The most frequently used strategies are behavioral saving strategies for increasing the efficiency of spending (e.g., shopping more carefully for food) and for reducing consumption (e.g., spending less on leisure). Qualitative results indicate that individuals also use goals and mental accounting to help them save, view their deposits as bills or pay their accounts first to help them make deposits, and create “rules-of-thumb” to maintain assets. Linear regression results suggest that the behavioral saving strategies are not predictors of savings amounts in IDAs. Additional research is needed to understand the saving process among low-income individuals.

Introduction

Financial assets increase economic security and provide opportunities for development. Unfortunately, individuals living in or near income-poverty are challenged to meet their basic expenses and still have money available to save. Exacerbating this situation, there are few institutionalized mechanisms that support saving and asset accumulation by low-income individuals (Beverly & Sherraden, 1999; Sherraden, 1991). In recent years, however, saving opportunities and supports have increased for this population, and research has documented that low-income individuals can save (Schreiner et al., 2001). Nevertheless, little is known about *how* the poor manage to set aside money. Programs and services can be improved by determining what circumstances and behaviors help low-income individuals to save money, make deposits, and maintain their assets.

Individual Development Accounts (IDAs) provide a context for investigating how low-income individuals save and accumulate assets (Sherraden, 1991). IDAs are explicitly designed to help low-income individuals accumulate assets. Participant savings are matched, typically at a rate of 2:1, when individuals make withdrawals for approved asset purchases such as home purchase, post-secondary education, or microenterprise. IDA programs have been implemented by economic development and other community organizations over the last ten years and have recently been supported by federal and state legislation and appropriations.¹ The Downpayments on the American Dream Policy Demonstration, or the “American Dream Demonstration” (ADD) is the first systematic evaluation of IDAs. Fourteen IDA programs in ADD have established 2,378 IDAs in low-income communities across the country. One attribute of the six-year ADD

¹ More than 350 IDA programs have been implemented or are in the planning phase throughout the United States and Canada. IDAs were included in the federal Personal Responsibility and Work Opportunity Reconciliation Act of 1996, and were legislated in the Assets for Independence Act of 1998. As of May 2000, 29 states had passed legislation supporting IDAs (Edwards, 2000).

evaluation design is the mix of quantitative and qualitative methods.² A key research question across all methods is: How do IDA participants set aside money for their IDA deposits?

Using data obtained through a cross-sectional survey with 298 ADD participants and case studies with 15 ADD participants, this paper provides perhaps the most detailed evidence on saving and asset-accumulation strategies used by low-income individuals. The first section summarizes theory related to saving and asset-accumulation strategies. The second section describes the two methods and samples. In the third and fourth sections, we present and discuss findings, including implications for theory and research.

Theory Related to Saving and Asset-Accumulation Strategies

Beverly, Moore, and Schreiner (2001) summarize theory and research related to saving and asset-accumulation strategies. The best-known theory is the behavioral life cycle hypothesis (BLCH) proposed by Shefrin and Thaler (1988; 1992; see also Thaler, 1990; Thaler & Shefrin, 1981). This model has at least four key propositions. First, it emphasizes that individuals have difficulty resisting temptations to spend, even when saving money is in their best interests. Second, it suggests that individuals create their own incentives or constraints to help them save. For example, individuals develop “rules-of-thumb” such as restricting borrowing to certain purchases, paying off credit card bills every month, or choosing to save a certain amount each month. Individuals also use “precommitment constraints,” techniques such as payroll deduction that make it difficult to choose current pleasure at the expense of future pleasure (Maital, 1986; Maital & Maital, 1994; Shefrin & Thaler, 1988).

Third, the BLCH proposes that individuals classify economic resources into separate “mental accounts.” The temptation to spend resources is expected to vary by account. For

² The research methods for ADD include an implementation assessment, case studies, program monitoring, a cross-

example, Shefrin and Thaler (1992) suggest that individuals earmark resources as current income, current assets, or future income and are quite likely to spend money designated as current income and quite unlikely to spend money designated as future income.³ Finally, Shefrin and Thaler contend that the source and amount of resources received determines how resources are earmarked. Large inflows, asset income, and other inflows not considered “regular, earned” income are expected to be earmarked as assets (Thaler, 1990).

Building on propositions from the BLCH and other research, Beverly et al. (2001) propose a framework of saving and asset-accumulation strategies. These scholars assume that asset accumulation occurs in three “stages.” First, individuals must consume less than their incomes by reallocating existing resources from consumption to saving and/or by increasing resource in-flows. Second, resources may be converted from some easy-to-spend form (e.g., cash) to a more difficult-to-spend form (e.g., resources in a bank account). Finally, individuals must maintain their savings by resisting pressure to withdraw funds. These stages are referred to as (1) saving, (2) depositing, and (3) maintaining assets.

Next, Beverly et al. (2001) suggest that there are two broad types of strategies, psychological and behavioral:

Psychological strategies are grounded in an individual’s conceptual understanding of her resource flows and savings goals and self-imposed mental constraints for making deposits and maintaining assets. Behavioral strategies represent efforts to change economic actions, especially efforts to control consumption and methods of making deposits and withdrawals. (p. 5)

sectional survey, in-depth interviews, an experimental design survey, a benefit-cost analysis, and a community-level evaluation (not implemented at an ADD site).

³ Individuals spend future income by borrowing.

Putting the two types of strategies together with the three stages of asset accumulation results in six strategy groups: (1) psychological saving strategies (e.g., mentally designating earnings from a second job as savings); (2) behavioral saving strategies (e.g., reducing consumption); (3) psychological depositing strategies (e.g., viewing deposits into savings as obligatory); (4) behavioral depositing strategies (e.g., arranging for direct deposit of paychecks into savings accounts); (5) psychological strategies for maintaining assets (e.g., adopting rules-of-thumb regarding the uses of savings); and (6) behavioral strategies for maintaining assets (e.g., choosing an account that has penalties for withdrawals). In this paper, we use the Beverly et al. framework to organize empirical findings related to saving and asset-accumulation.

Finally, in addition to the BLCH and the strategy framework just described, Beverly and Sherraden (1999) have hypothesized that institutions—formal and informal socioeconomic relationships, rules, and incentives—influence saving and asset-accumulation processes. The emphasis on institutions suggests that the institutional characteristics of saving opportunities may shape the saving and asset-accumulation strategies used by individuals. IDA programs provide several examples. First, matching funds may increase the reward for saving and may therefore motivate individuals to save. By pointing out the benefits of saving, the financial education classes offered by IDA programs may motivate individuals to set savings goals and to increase or reallocate resources for saving. Financial education classes may also teach “rules-of-thumb” and other psychological tools that help individuals to maintain assets. And, by teaching budgeting skills, classes may help individuals make behavioral choices that increase their ability to set aside money for IDA deposits. With direct deposit into IDAs, which is available at some programs, individuals do not have to deposit resources on a recurrent basis because resources go directly into savings. Finally, IDAs may make it easier to maintain savings because withdrawals

are restricted; matching funds can only be withdrawn for an approved asset purchase, and participants may have to obtain approval from staff before withdrawing their own IDA deposits for other purposes.

The data presented in this paper show how individuals exercise self-control by adopting strategies for saving, depositing, and maintaining financial assets. The data provide specific examples of the strategy groups identified by Beverly et al. (2001), and they also highlight the importance of the saving context including the structure and information provided to participants.

Methods and Sample

Data for this research come from a cross-sectional survey and case studies of ADD participants, which were the first ADD methods to assess saving behavior. The purpose of the cross-sectional survey was to obtain early data on saving strategies and the outcomes of IDAs in ADD.⁴ The following sections describe data collection and analysis methods and sample characteristics.

Data Collection and Analysis

ADD cross-sectional survey. The ADD cross-sectional survey was designed to assess participant perceptions of the various components of IDA programs, of the saving process, and of the effects of IDAs. Of the 13 organizations in ADD, six volunteered to implement the survey. These six organizations were asked to survey all IDA participants who had been in the program for at least six months. Across the programs, 378 current IDA participants met this criterion, and 298 (79 percent) completed the survey. The surveys were administered between

⁴ ADD also has an experimental design survey, which will yield more definitive data on outcomes in the years ahead.

August and October 1999 by trained ADD program staff through face-to-face, telephone, or group interviews.

Survey respondents were asked whether they or anyone else in their households had done each of 11 activities “to set aside money for IDA deposits.” These items were a first attempt to identify saving strategies used by low-income participants and are not exhaustive. An open-ended item asked respondents to describe any additional strategies they had used. Responses to the open-ended item were analyzed using the qualitative analysis software program, Atlas-ti. Each response was coded, and the software generated frequencies by code with retrievable quotations. Seventy-two respondents named a total of 80 strategies. These data are used descriptively in this paper to demonstrate the range of strategies used by participants.

Survey respondents were also asked the following question: “Which of the following statements best describes how you saved before you joined the IDA program?” Response options included “I did not save;” “If I had extra money, I saved some of it;” and “I saved a regular amount each month.” We then asked respondents about saving regularity during their IDA participation. Finally, respondents were also asked to report total IDA deposits and withdrawals.

Several potential sources of bias are worth noting. First, the sample includes only current ADD participants; it excludes individuals who had exited ADD programs either voluntarily or involuntarily. Therefore, it may include a disproportionate number of “successful” savers. Second, the fact that IDA program staff administered the survey may have increased social desirability bias, the tendency for survey respondents to give answers that they believe will please interviewers. Finally, when reporting IDA deposits and withdrawals, respondents were encouraged to refer to recent account statements, but most responded from memory. Therefore,

our measure of saving in IDAs—the dependent variable in the multivariate regression described below—may be noisy.⁵

ADD case studies. Case studies use interviews to elicit in-depth information about an individual. They are particularly useful when little is known about the topic being studied (Yin, 1998). The purpose of these case studies was to learn about low-income participants' saving histories, current saving behaviors, and their experiences in an IDA program. Case studies were conducted with 15 IDA participants at five different ADD programs in late 1998 and early 1999. One or two face-to-face interviews were conducted with each respondent by CSD research staff, with the average interview lasting a total of four hours. Each interview tape was transcribed and entered into the qualitative analysis software program, Atlas-ti. The interview text was then coded, in two stages, by two researchers who developed a common coding structure and identified themes.

Two potential sources of bias are worth noting. First, the exploratory nature of the interviews resulted in a range of issues being covered, not all of which had relevance for the purposes of this paper. The authors selected the coded interview text to integrate in this paper. Respondents, however, shared in their own words and without prompting, the saving strategies that they used. Second, the case study participants were selected for participation by the ADD program staff. Although staff members were encouraged to select participants who represented average and low savers as well as high savers, the case study sample includes a disproportionate number of high and consistent savers.

Sample Description

⁵ Cross-checks with actual financial data collected through other ADD methods were not possible because surveys were anonymous.

Cross-sectional survey sample. Demographic characteristics of the cross-sectional survey sample are provided in Table 1. These variables serve as controls in the multivariate regression described below.

Insert Table 1 about here

Respondents were predominantly female (80 percent). The sample ranged in age from 14 to 71 years, with an average age of 38. Sixty-seven percent were Caucasian, and 22 percent were African-American. At the time of the survey, 74 percent of the respondents had children living with them. The average number of children was 1.5. Thirty-six percent lived with a spouse or domestic partner. Fifty-one percent had attended college, and another 22 percent had graduated from a four-year college. Thirty-three percent of the sample had typical monthly income less than \$1,000, and 38 percent had income between \$1,000 and \$1,500. Except for race and ethnicity, these demographic characteristics are generally consistent with the entire ADD population as reported in Sherraden et al. (2000). The average respondent had been in ADD for 14 months.

Two hundred and two participants identified 339 total asset goals, including 256 participants who named one asset goal, 37 participants who named two asset goals, and five who named three. The most common goal was home purchase (42 percent of all goals), followed by microenterprise (22 percent), post-secondary education (17 percent), and home repair (16 percent).

Average monthly net deposit (AMND) is a measure of saving in IDAs. More specifically, it is the total amount deposited by an IDA participant (not including matching

funds) minus unmatched withdrawals, divided by months of participation. For the 271 current participants who provided deposit and withdrawal information, AMND ranged from \$0 to \$86. The average AMND was \$26, and the median was \$24.

Case study sample. Fifteen IDA participants comprised the case study sample (Table 1). These individuals were predominately female (80 percent), African-American (60 percent), living alone (87 percent), and college-educated (67 percent). About 47 percent had monthly incomes less than \$1,000. The median length of program participation was 16 months, and the average monthly deposit into the IDA account was \$26.

Findings

In this section, we use the framework proposed by Beverly et al. (2001) to organize univariate results from the cross-sectional survey. Responses to closed-ended survey items relate to behavioral saving strategies. Responses to the open-ended survey item reflect additional behavioral saving strategies as well as psychological saving strategies and behavioral and psychological depositing and maintaining strategies. Where possible, to illustrate strategies, we integrate responses from the case-study participants. We also present results from an ordinary least squares regression assessing the impact of behavioral saving strategies on savings amounts in IDAs.

Behavioral Saving Strategies

The behavioral saving strategies used by the survey respondents are organized according to the six behavioral saving strategies identified by Beverly et al. (2001): increase efficiency, reduce consumption, increase income, sell assets, increase debt, and monitor resource flows.

Increase efficiency. Individuals may reallocate resources toward saving by increasing efficiency, that is, by spending less on the same quantity of goods and services. Three of the

closed-ended survey items involve increasing efficiency: shopping more carefully for food, eating out less, and buying used (rather than new) clothing. As shown in Table 2, the single most common strategy for financing IDA deposits was to shop more carefully for food (70 percent of respondents reported using this strategy), followed by eating out less often (68 percent). Fifty-five percent of the sample said they had purchased used rather than new clothing in order to finance IDA deposits.

Insert Table 2 about here

In response to the open-ended item, 18 survey respondents named additional strategies that involved increasing efficiency, primarily using coupons and buying discounted items. Comments by case study participants also suggest that increasing efficiency is a common way to set aside money for savings and that institutions—for example, financial-education classes—can encourage this type of strategy. One participant explains how she reallocates her resources for IDA deposits:

This program has helped me see where I can find the money . . . Have Kool-Aid or whatever's in the house and then you would have that money to get into the program. But I never thought about that when I wasn't in this program. It just seemed like I could go out and buy all this pop and stuff even though I wasn't saving. But now I don't do that.

The following quote from a case study participant also shows behavioral changes made to save for IDA deposits and the calculations that motivated these changes:

. . . to change my lifestyle has been that I try much harder to make my own coffee rather than buy coffee. 'Cause if you spend a dollar every day, that's seven dollars a week. It definitely adds up over a year. It's hundreds of dollars over a year. Or if you're buying your own coffee, like I wait until it goes on sale and buy a gallon can of it for \$2 or something. That saves you, that's got to save you like \$50, if you buy it that way. Just little things like that. Just don't buy a sandwich at the deli. Buy a loaf of bread at the grocery store instead and make 10 sandwiches for the same price. You can really make your money go a lot further that way.

Reduce consumption. Another way to reallocate resources toward saving is to reduce the quantity of goods and services consumed. Three closed-ended survey items involve reducing consumption: spending less on leisure, spending less on cigarettes or alcohol, and postponing doctor or dentist visits (Table 2). The last item calls attention to the fact that some consumption reductions are undesirable.

The most common strategy in this category was spending less on leisure (named by 64 percent of respondents). Across all strategies, spending less on leisure was the third most common strategy for financing IDA deposits. Thirty-four percent of survey respondents said they spent less on cigarettes and alcohol,⁶ and seventeen percent said that they postponed doctor or dentist visits.

In response to the open-ended item, eight respondents named additional ways they reduced consumption. These included buying fewer “treats,” not taking trips or vacations, and not renewing health club memberships. Three survey respondents said they reduced their

⁶ This figure may underestimate the percentage of those who consumed cigarettes or alcohol who spent less on these purchases to finance IDA deposits. Those who did not smoke or drink alcohol may have responded negatively rather than deeming this item “not applicable.”

household consumption of utilities. One case study participant describes how an exercise in a financial-education class helped her to become more aware of ways to reduce her consumption:

We had to, once we did come to class, we had to write everything we did within the three weeks before class, to try to help us see where we can save some more money at. So I did do that, and I did find myself saving \$20 a week. Then the next month, I found myself saving like \$40 and as we started going to class, I just stopped completely buying unnecessary things . . . The money that I saved, I put in the IDA.

Increase income. Only one closed-ended survey item related to increasing income. Twenty-nine percent of the sample reported working more hours to set aside money for their IDA deposits. In response to the open-ended item, six respondents named specific strategies used to increase income, including working a part-time job and working for neighbors or relatives. One case study participant describes what she has done to generate additional income for IDA deposits:

Like I said, it's hard for me to make ends meet at all so I came across a craft that I know how to do. Well, it's candy jars is what I'm making So I've been doing that to make extra money now for a few months.

Sell assets. Again, only one closed-ended item assessed this type of strategy. Twelve percent of the survey sample reported selling household or personal items to make IDA deposits (Table 2). In response to the open-ended item, one respondent indicated she had returned bottles, and another said she had sold videos from her home collection.

Increase debt. Three closed-ended survey items involve increasing debt: postponing the payment of bills, borrowing from friends and families, and borrowing from credit (Table 2). Sixteen percent of the sample said they postponed paying bills in order to make IDA deposits.

One respondent specifically reported not paying medical bills. Seven percent said they borrowed from family or friends, and three percent borrowed from credit cards. One respondent to the open-ended item said that she had used school loans to make deposits, and a case study respondent said that she had borrowed from her mother to make IDA deposits. These strategies may be under-reported because IDA programs explicitly discourage participants from financing deposits by assuming debt.

Monitor resource flows. The sixth type of behavioral saving strategy identified by Beverly et al. (2001) involves monitoring resource in-flows and out-flows, or “budgeting.” Although the cross-sectional survey did not ask whether participants monitored resource flows, respondents to the open-ended item and participants in the case studies identified budgeting as a behavioral strategy used to reallocate resources for their IDA deposits. Seven respondents to the cross-sectional survey said that they were able to set aside money for their IDA deposits because they were budgeting. Some case study participants noted that they were keeping track of their expenses on a regular basis, so that they had enough money left over for monthly IDA deposits. One case study participant reflects on the role of budgeting in his and his partner’s saving:

As for changes to save the money, I think what we did is we just got smarter. I think we made it a priority. We looked at our bills. We looked at what we could spend, what we can’t spend. Where can this money come out of?

Save a regular amount. Although Beverly et al. (2001) did not include saving a regular amount each month (or each week, or each pay period) in their strategy framework, we believe that this is a seventh type of behavioral saving strategy. As noted above, survey respondents were asked to report their saving regularity before and during ADD participation.

Insert Table 3 about here

Forty-two percent of participants said they did not save before their ADD participation, 46 percent said they saved if they had extra money, and 11 percent said they saved a regular amount each month (Table 3). Self-reported saving regularity increased during ADD participation. Four percent of current participants said they did not save while they had IDAs, 33 percent said they saved if they had extra money, and 62 percent said they saved a regular amount each month.

Data showing *changes* in saving regularity are also interesting because they may reveal institutional effects of IDA participation (Table 4).

Insert Table 4 about here

More than 75 percent of those who did not save a regular amount each month before they enrolled in ADD said they saved more regularly during their IDA participation, including 28 percent who said they did not save before joining ADD but had saved a regular amount each month while participating in ADD. Four percent said they saved less regularly during their IDA participation than they had before enrolling. We do not know how many individuals had made a deliberate decision to save a regular amount each month.

The rest of the strategies discussed here were not specifically addressed in the cross-sectional survey. However, responses to the open-ended item and comments from the case study participants suggest that low-income individuals use behavioral depositing and maintaining strategies as well as psychological saving, depositing, and maintaining strategies. These are discussed in the following five subsections.

Behavioral Depositing Strategies

Arrange for direct deposit. Direct deposit from income into savings accounts is a precommitment constraint that makes recurrent saving and depositing decisions automatic. Eleven respondents to the open-ended item said they set aside money for their IDA deposits by using direct deposit. One case study participant describes her use of direct deposit:

I just started working almost six weeks ago. So this I knew. Automatic deduction. Payroll deduction. Immediately gone, I won't see it. It's the most wonderful thing. And that helps me manage.

Pay savings account first. Seven respondents to the open-ended item said that they made their IDA deposits immediately after receiving income. A case study participant describes her use of this strategy:

Now what I do when I get paid every two weeks, I try to pay myself [in the IDA] before I pay my bills.

Behavioral Maintaining Strategies

Save in account where withdrawals are restricted. All ADD participants have chosen to save in accounts that might be viewed as slightly illiquid. Although no survey or case study respondent said that they had enrolled in ADD because IDAs have this feature, one respondent to the open-ended survey item did note that restrictions on withdrawals reduce temptations to withdraw money from IDAs and help her maintain assets.

Psychological Saving Strategies

Psychological strategies for increasing or reallocating resources reflect an individual's conceptualization of the saving process and resource flows. The outcome of these strategies may be a commitment to saving and to directing one's resources to a saving or asset goal.

Set and mentally focus on a saving or asset goal. Two respondents to the open-ended survey item mentioned setting a saving or asset goal to help them set aside money for their IDAs. Two other respondents noted that they had made goals that they were now making an “effort to stick to.” The case studies are replete with examples of how ADD participants are developing goal-directed thinking that may impact how they save. Many noted that they were saving because they “have created goals” or “can see the outcome.” This young case study respondent highlights how goal-setting helps her stay focused:

I was blowing money 24-7 Then I hooked up with [the IDA program] and I don't do that no more Cause I know where I want to go and where I want to be in the next couple years. I got my goals set.

Use mental accounts. Those who use mental accounting to help them save may earmark certain resource in-flows as sources of savings deposits. Three respondents to the cross-sectional survey said that they earmarked tax refunds for their IDA deposits, and one earmarked child support payments.

Psychological Depositing Strategies

View deposits as bills. Eight respondents to the open-ended item said that they viewed their IDA deposits as bills, so that saving is perceived as obligatory. One respondent said, “I just treat it like a bill that I have to pay every month.”

Psychological Maintaining Strategies

Adopt rules-of-thumb. The following quote from a case study participant reveals that some low-income individuals develop rules-of-thumb that help them maintain assets:

If we withdraw . . . it got to be a very major, major reason why we got to I'm looking at that money as like money I just can't even touch. I don't want to touch it.

Another participant says:

I want to do so well with this program that I would never think about going there and withdrawing that money. That money is like special. You can't touch that, that is for your house.

This participant shares how she perceives her IDA savings:

It's hard enough to save money and to actually get it to amount up to anything It's like a separation on my mind. This money is not spending money. This is money that's put up. And it's more a mental thing of it, really is separated, you know.

Behavioral Saving Strategies and Savings Outcomes

Survey respondents report using a range of behavioral saving strategies in order to set aside money for their IDA deposits, but how do these strategies influence saving in IDAs? To investigate this question, we regressed average monthly net deposit (AMND) on the behavioral saving strategies and on saving regularity, while controlling for the influence of demographic characteristics, asset goal, length of program participation, and program dummies.⁷ The overall model is statistically significant, and the independent variables explain approximately 24 percent of the variance in AMND (Table 5).⁸

⁷ The coefficients on the program dummies reflect the influence of factors that the model does not control for but that are correlated both with the specific program and with AMND.

Insert Table 5 about here

None of the behavioral saving strategies is a statistically significant predictor of AMND. However, saving regularity is. Those who said they saved a regular amount each month during their ADD participation saved, on average, about \$14 more per month than those who said they did not save, and about \$7 more per month than those who said they saved extra money. We discuss these findings below.

Discussion

The ADD cross-sectional survey respondents and the case study participants report using a wide variety of strategies to save, deposit, and maintain assets. Increasing efficiency and reducing consumption appear to be the most common types of behavioral saving strategies. The fact that IDA participants are reallocating resources in order to save in IDAs reveals that they are willing to alter current consumption choices for the possibility of improved well-being through asset accumulation. This is an important finding because some believe that the poor are not future-oriented and/or do not value saving and asset accumulation.

Regression results suggest that no single behavioral saving strategy leads to more IDA saving than any other strategy. It is quite likely that individual circumstances determine which strategies are most effective and that individuals adopt the strategies that are most effective for them. However, there are several possible alternative explanations for this finding. First, as noted above, the dependent variable is noisy because financial data are self-reported. Second, the survey did not capture variation in the implementation of strategies. For example, participants may have increased work hours by one hour or by 20 hours. Third, prior to IDA

⁸ List-wise deletion of missing cases was used in this model. A model using pair-wise deletion was also estimated.

participation, individuals may have adopted the strategies that produce the highest returns and during their IDA participation they may have adopted new strategies that produce smaller effects. Finally, high-return strategies may also have high costs, and participants may have avoided high-return strategies in order to avoid these costs. Investigating the decision-making process that leads individuals to choose one saving strategy over another is an important area for future research.

For IDA participants, it appears that financial-education classes have some influence on the adoption of saving strategies. In open-ended comments, participants often attributed their ability to save to financial-education classes and even to specific skills that had been taught. This finding underscores the potential impact of institutionalized saving programs on the saving behaviors of low-income families and raises questions about how best to help participants choose saving strategies. Additional research should focus on the relative effectiveness of strategies—given the time and effort involved and the savings and asset-accumulation outcomes that result—and the effect that the provision of information can have on strategy choice. It is important to help individuals consider the positive and negative “side effects” associated with specific saving strategies. Some strategies may have positive side effects, such as possible health benefits from reductions in smoking and alcohol consumption. Other strategies may have negative side effects. For example, postponing medical care may negatively affect health, and postponing paying bills may decrease future economic well-being.

Other findings reported here demonstrate the use of behavioral depositing and maintaining strategies, such as arranging for direct deposit and saving in accounts where withdrawals are restricted, and psychological saving, depositing, and maintaining asset

There were no statistically significant or substantive differences between the two models. Also, there was no evidence of excessive multicollinearity.

strategies, such as focusing on saving goals, using mental accounts, viewing deposits as bills, and adopting rules-of-thumb about withdrawals. These strategies emerged in the data even though they were not purposely asked about in either of the methods. As a result, participants provided examples for each of the six strategy groups identified by Beverly et al. (2001). In our opinion, this provides support for the Beverly et al. framework. Future research should continue to investigate the validity of this framework.

The fact that saving regularity was associated with greater saving in IDAs is consistent with the claim that saving regularity is an effective saving strategy. However, we do not know which individuals had made conscious commitments to save regularly. Some may have adopted regular saving as a strategy but were unable to fulfill this commitment. A few may have saved regularly without having set out to do so. Future research should examine whether committing to save a regular amount each month is an effective saving strategy.

In conclusion, asset-accumulation is a process. It takes both time and resources. One of these resources is knowledge about available options of how to manage the process. The data presented in this paper demonstrate that IDA participants are consciously selecting strategies that will enable them to save, deposit, and maintain their assets, given limited discretionary incomes. As programs and policies are created to facilitate saving by low-income individuals, it is important to consider how the process unfolds, and how it can be supported.

Table 1**Characteristics of American Dream Demonstration Project Samples**

| | Cross-Sectional Survey Sample (N=298) | | Case Study Sample (N=15) | |
|---------------------------------------|--|----------------|---|----------------|
| | Frequency | Percent | Frequency | Percent |
| Gender | | | | |
| Male | 59 | 20 | 3 | 20 |
| Female | 238 | 80 | 12 | 80 |
| Race/ethnicity | | | | |
| Black/African-American | 64 | 22 | 9 | 60 |
| White/Caucasian | 195 | 67 | 5 | 33 |
| Other | 34 | 12 | 1 | 7 |
| Lives with spouse or partner | | | | |
| Yes | 105 | 36 | 2 | 13 |
| No | 191 | 64 | 13 | 87 |
| Education | | | | |
| Less than high school diploma | 32 | 11 | 2 | 13 |
| Graduated high school or received GED | 48 | 16 | 3 | 20 |
| Some college ^a | 152 | 51 | 10 | 67 |
| Graduated from four-year college | 65 | 22 | | |
| Typical monthly income | | | | |
| Less than \$1,000 | 98 | 33 | 7 | 47 |

| | | | | |
|-----------------------------|-----|----|---|----|
| Between \$1,000 and \$1,500 | 111 | 38 | 5 | 33 |
| Between \$1,500 and \$2,000 | 44 | 15 | 2 | 13 |
| Greater than \$2,000 | 40 | 14 | 1 | 7 |
| Asset goals | | | | |
| Home purchase | 142 | 42 | 9 | 60 |
| Microenterprise | 73 | 22 | 4 | 27 |
| Post-secondary education | 59 | 17 | 1 | 7 |
| Home repair | 53 | 16 | 1 | 7 |
| Other | 12 | 4 | 0 | 0 |

^aData on college participation and graduation were not separated for case study respondents.

Note: Due to missing data, sample size differs by characteristic. Percentages may not sum to 100 due to rounding.

Table 2**Behavioral Saving Strategies Used by Cross-Sectional Survey Respondents**

| | N | Number Using Strategy | Percent Using Strategy |
|--------------------------------------|----------|--------------------------------------|---------------------------------------|
| Increase efficiency | | | |
| Shops more carefully for food | 291 | 203 | 70 |
| Eats out less | 283 | 191 | 68 |
| Buys used clothing | 285 | 157 | 55 |
| Reduce consumption | | | |
| Spends less on leisure | 285 | 182 | 64 |
| Spends less on cigarettes or alcohol | 202 | 69 | 34 |
| Postpones doctor or dentist visits | 296 | 51 | 17 |
| Increase income | | | |
| Works more hours | 296 | 87 | 29 |
| Sell assets | | | |
| Sells household or personal items | 294 | 35 | 12 |
| Increase debt | | | |
| Postpones paying bills | 297 | 46 | 16 |
| Borrows from family and friends | 297 | 22 | 7 |
| Borrows from credit | 297 | 9 | 3 |

Source: Closed-ended questions from the ADD cross-sectional survey.

Table 3

Saving Regularity of Cross-Sectional Survey Respondents

| | Did Not Save | Saved Extra Money | Saved Regular Amount |
|---|---------------------|------------------------------|---------------------------------|
| Before IDA participation (N=296) | 42% | 46% | 11% |
| During IDA participation (N=294) | 4% | 33% | 62% |

Source: ADD cross-sectional survey.

Table 4**Change in Saving Regularity by Cross-Sectional Survey Respondents(N=294)**

| Saving Regularity Before IDA Participation | Saving Regularity During IDA Participation | | |
|---|---|------------------------------|---------------------------------|
| | Did Not Save | Saved Extra Money | Saved Regular Amount |
| Did not save | 1% | 15% | 25% |
| Saved extra money | 1% | 16% | 29% |
| Saved regular amount | 0% | 3% | 8% |

Source: ADD cross-sectional survey.

Table 5**Predictors of Average Monthly Net Deposit: Ordinary Least Squares Regression Results**

| | Coefficient | p-value |
|--|--------------------|----------------|
| MALE | 0.24 | 0.93 |
| AGE | 0.04 | 0.72 |
| RACE/ETHNICITY (compared to white) | | |
| Black/African-American | 0.26 | 0.96 |
| Other | 1.06 | 0.76 |
| LIVES WITH SPOUSE OR PARTNER | 2.73 | 0.26 |
| NUMBER OF CHILDREN | -0.81 | 0.33 |
| EDUCATION (compared to less than high school degree) | | |
| High school degree/GED | 2.05 | 0.63 |
| Some college | 3.20 | 0.38 |
| College degree | 5.01 | 0.22 |
| MONTHLY INCOME (compared to less than \$1,000/ month) | | |
| Between \$1,000 and \$1,500 | 5.93 | 0.02 |
| Between \$1,500 and \$2,000 | 2.11 | 0.55 |
| Greater than \$2,000 | 0.09 | 0.98 |
| ASSET GOAL | | |
| Home purchase | 4.14 | 0.19 |
| Home repair | -1.68 | 0.65 |
| Post-secondary education | 5.59 | 0.07 |
| Microenterprise | -0.69 | 0.82 |
| MONTHS IN THE PROGRAM | -0.30 | 0.15 |
| ADD IDA PROGRAM (compared to ADD Program 6) | | |
| ADD Program 1 | 18.33 | 0.00 |
| ADD Program 2 | 1.25 | 0.70 |

| | | |
|---|--------|------|
| ADD Program 3 | 7.08 | 0.05 |
| ADD Program 4 | -5.49 | 0.23 |
| ADD Program 5 | -0.83 | 0.88 |
| SAVING REGULARITY BEFORE IDA (compared to those who saved a regular amount each month) | | |
| Did not save | -4.75 | 0.16 |
| Saved, if had extra | -2.36 | 0.48 |
| SAVING REGULARITY DURING IDA (compared to those who save a regular amount each month) | | |
| Do not save | -13.78 | 0.02 |
| Save, if have extra | -7.22 | 0.00 |
| BEHAVIORAL SAVING STRATEGIES | | |
| Shops more carefully for food | 0.18 | 0.95 |
| Eats out less | -1.00 | 0.71 |
| Buys used clothing | -0.98 | 0.66 |
| Spends less on leisure | 0.41 | 0.87 |
| Spends less on cigarettes/alcohol | -0.35 | 0.89 |
| Postpones doctor/dentist | -2.30 | 0.43 |
| Works more | 2.26 | 0.32 |
| Sells items | -0.56 | 0.86 |
| Postpones paying bills | -0.43 | 0.89 |
| CONSTANT | 25.24 | 0.00 |
| R ² | .362 | |
| Adjusted R ² | .242 | |
| F | 3.03 | 0.00 |
| N | 222 | |

Source: ADD cross-sectional survey.

REFERENCES

- Beverly, Sondra G., and Michael Sherraden. 1999. Institutional determinants of saving: Implications for low-income households and public policy. *Journal of Socio-Economics*, 28:457-473.
- Beverly, Sondra G., Amanda Moore, and Mark Schreiner. 2001. "A framework of saving and asset accumulation strategies." University of Kansas, School of Social Welfare, Lawrence, KS.
- Edwards, Karen. 2000. State IDA policy update. St. Louis, MO: Washington University, Center for Social Development. Available at <http://gwbweb.wustl.edu/Users/csd/>
- Maital, Shlomo. 1986. "Prometheus rebound: On welfare-improving constraints." *Eastern Economic Journal* 12:337-344.
- Maital, Shlomo and Sharone. L. Maital. 1994. "Is the future what it used to be? A behavioral theory of the decline of saving in the West." *Journal of Socio-Economics* 23:1-32.
- Schreiner, Mark, Sherraden, Michael, Clancy, Margaret, Johnson, Lissa, Curley, Jami, Grinstein-Weiss, Michal, Zhan, Min, & Beverly, Sondra. 2001. *Savings and asset accumulation in IDAs: Downpayments on the American Dream Policy Demonstration, a national demonstration of Individual Development Accounts*. St. Louis, MO: Washington University in St. Louis, Center for Social Development.

Shefrin, Hersh M. and Richard H. Thaler. 1988. "The behavioral life-cycle hypothesis."

Economic Inquiry 26:609-643.

—. 1992. "Mental accounting, saving, and self-control." Pp. 287-330 in *Choice over time*, edited by G. Loewenstein and J. Elster. New York: Russell Sage Foundation.

Sherraden, Michael. 1991. *Assets and the poor: A new American welfare policy*. Armonk, NY: M. E. Sharpe, Inc.

Sherraden, Michael, Lissa Johnson, Margaret Clancy, Sondra G. Beverly, Mark Schreiner, Min Zahn, & Jami Curley. 2000. *Saving patterns in IDA programs*. St. Louis, MO: Washington University, Center for Social Development.

Thaler, Richard H. 1990. "Saving, fungibility and mental accounts." *Journal of Economic Perspectives* 4:193-205.

Thaler, Richard H. and Hersh M. Shefrin. 1981. "An economic theory of self-control." *Journal of Political Economy* 89:392-401.

Yin, Robert K. 1998. The abridged version of case study research. In Bickman, Leonard, & Rog (Eds.), *Handbook of applied social research*. Thousand Oaks, CA: Sage Publications.